



Docket No. 915-005-074
Serial No. 10/688,273

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Re Application of: **MYLLY et al.**

Serial No.: **10/688,273**

Examiner: **Chun Kuan Lee**

Filed: **October 17, 2003**

Group Art Unit: **2181**

**For: A METHOD FOR CHANGING THE MODE OF A CARD, A SYSTEM, A
CARD, AND A DEVICE**

Mail Stop AF
Commissioner For Patents
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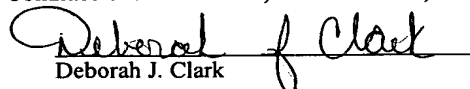
PRE-APPEAL BRIEF REQUEST FOR REVIEW

Sir:

This Request for Review is filed in response to the final Office Action of
January 25, 2006.

CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service
on the date shown below with sufficient postage as first class mail in an envelope addressed to:
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Deborah J. Clark

Dated: April 25, 2006

REMARKS

Regarding the requirement to elect, Applicant hereby elects the dependent claims of species 1.

Regarding the 35 U.S.C. §102(a) rejection of independent method claim 1 and its dependent claims 5 and 6, independent system claim 7 and its dependent claim 12 and independent card claim 13 and its dependent claim 14, the Examiner does not find the Applicant's argument about what the Linskog et al reference (US 2002/0132603) teaches to be persuasive. Applicant has argued that the subject independent claims 1, 7 and 13 claim that the mode of a card connected to an interface of a terminal, upon changing in response to a command from the terminal, generates an interrupt request related to the change in the mode of the card wherein the interrupt request received from the card (relating to the mode change) is processed in the terminal. This is an advantage over the prior art where a card in a dormant mode switches to the normal mode upon command from the terminal but does not then do anything to make the terminal aware of the fact that it has switched modes in response to the command. The terminal has to either wait for a maximum timeout or interrogate the card to find out whether the card is out of the dormant mode.

The Examiner points to claim 17 of Linskog et al for showing this, even though the Examiner recognizes that Linskog does not explicitly disclose what is claimed. In reality, the exact content of the Linskog et al disclosure cannot be determined because the term "Mobile Terminal" in Linskog et al refers to both the wireless Network Interface Card (NIC) and the PC. See page 1, paragraph [0003]. Besides that, the Linskog et al disclosure is quite hard to understand even without the aforementioned confusion introduced by the dual use of the term Mobile Terminal.

From our best attempt at understanding the reference, in Linskog et al the Mobile Terminal sends a request to the Network Interface Card (NIC), which in turn sends a request to the access point. The access point responds, after which (according to Fig. 2 of Linskog et al) the mobile terminal makes another request and now the NIC can reply with an indication of its mode to the access point. In addition, in the Linskog et al reference, the mobile terminal is in the sleep mode (as claimed in claim 17) and thus the entire chain is awakened. In the presently claimed invention, the focus is on the card and what happens when it is responding to a command to wake up from the terminal.

As explained in the background of the invention section of the present application, there is a disadvantage in the prior art in that the terminal has to wait for a maximum timeout period or has to interrogate the card. The present invention provides the solution by means of an interrupt request related to the change in the mode of the card from the card to the terminal

via the interface at the stage where the card shifts to the normal mode. The terminal processes the interrupt request accordingly and does not have to wait for the maximum period or does not need to interrogate the card to find out before the period expires whether it is out of the dormant mode yet. An interrupt request is of course a signal or other input requesting that the currently executing process be suspended to permit performance of another process. Thus, the interrupt request expressly claimed and received from the card and relating to the mode change is processed in the terminal with this kind of an effect that would be caused by an interrupt request, i.e., to commence treating the card as in normal mode rather than dormant mode as opposed to what it was doing before that.

The Examiner argues that claim 17 of the Lindskog reference somehow shows this. However, whatever claim 17 shows, which is not clear even after a careful review of the entire Lindskog patent application, it clearly does not anticipate claims 1, 7 and 13 of the presently claimed invention.

It is a stated problem for Lindskog et al (see page 2, paragraph 0036, that the interactions between the PC power save mode and other WLAN NIC power saving mechanism, i.e., Wake-On-LAN and Hyperlan Type 2 (H2) or 802.11 power save is not known. The problem dealt with by Lindskog therefore appears to be related to the difficulties involved in achieving a reconciliation between different kinds of power saving mechanisms existing in both the terminal, and the card in the WLAN environment.

In the presently claimed invention there are two elements involved (terminal, card), but in the Lindskog et al reference there are three (terminal, card, access point). In the present invention, the terminal simply sends a command to the card to suspend a power saving mode. In the Lindskog et al reference, a mobile terminal in a low power mode requests a transition to an active state. It does not say where this request is sent. Notice it is the terminal that is in the low power mode and nothing is said in regard to the state of the card.

The Examiner feels that claim 17 indicates that an acknowledgement from the access point concerning a request must be transferred to the card in order to be transferred to the mobile terminal and furthermore, since it would require the CPU or the like within the terminal to process the acknowledgement in order for the mobile terminal to enter the WLAN active state, the card must issue an interrupt signal regarding the acknowledgement, wherein receiving and processing of the interrupt signal request by the CPU is well known to one skilled in the art.

However, the Lindskog et al reference deals with a sleep to active transition beginning in paragraph 0056 on page 3. In paragraph 0057 it states that the terminal can send an order to the card to exit the sleep state. Two alternatives are then presented. First, in

paragraphs 59-61 a resource request message could be sent towards the access point. Second, as pointed out in paragraph 62, the wireless card doesn't do anything until requested. The remaining scenarios discussed at the bottom of page 3 and continued onto page 4 only discuss the sending of a signal from the card to the terminal in response to the access point and don't say anything about sending a signal like an interrupt back to the terminal in response to a command from the terminal to set the card into the normal mode from the dormant mode. Again, Lindskog et al doesn't have anything to do with the problem addressed by the present invention but is rather trying to figure out how to handle different kinds of sleep mode mechanisms among different entities in a WLAN environment.

Therefore, the 35 U.S.C. §102 (a) rejection of claims 1, 5, 6, 7, 12, 13 and 14 based on Lindskog et al is inapplicable and should be withdrawn to avoid an unnecessary appeal.

Regarding the obviousness rejection of claims 2 (dependent from independent method claim 1), 8 (dependent from independent system claim 7), and 15 (dependent from independent card claim 13), the Wiegel reference (US 6,131,163) has been described by the Examiner as teaching an interrupt line coupling the network interface card (NIC) to the processor. However, it is not an interrupt line that the present application relates to, but how an interrupt line that is multiplexed to data line can be used to indicate the end of a power saving mode. Furthermore, the claims 2, 8 and 15 depend from independent claim 1, 7 and 13 which as described above are new and novel over Lindskog and these dependent claims are at least patentable for the same reasons as discussed above.

Regarding the dependent claim 3 and 9 being rejected for obviousness over Robinson combined with Lindskog and Wiegel, Applicant's comments regarding Robinson are similar to those of Wiegel, i.e., the present application does not relate to this type of use of a signal line (mode 1 and mode 2), but to how such a line is applied with claims 1 and 2. The rejection of claims 3 and 9 should therefore also be withdrawn.

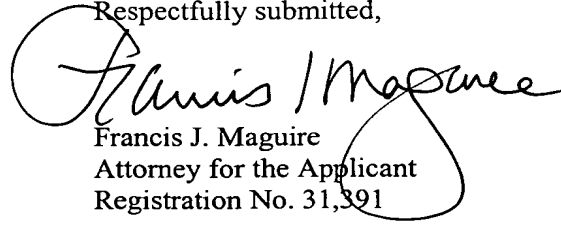
Regarding claims 4, 10 and 16 rejected based on Lindskog in combination with Wiegel and further in view of Kihara et al (US 6,212,097), it is true that multiplexing is known as such and multiplexing has been used in MMCA from the beginning. But again, this is not what the present invention relates to, but the combination of all of these in this environment. The rejection of claims 4, 10 and 16 should also be withdrawn.

Regarding the indefiniteness rejection of claim 19, it is not inconsistent with amended claim 17. Claim 19 clearly states that the interrupt request is generated by the card. The mobile station comprises means for transmitting the interrupt request via the interface from the card to the mobile station where the mode change is processed. Amended claim 17 simply says the interrupt is received by the terminal without explicitly mentioning that it is

transmitted via the interface to the interrupt processor. It should be mentioned that the amendment of claim 17 was made without prejudice. Withdrawal of the indefiniteness rejection of claim 19 is also requested.

For all of the above reasons, it is believed that the presently claimed invention is patentable over the art of record and it is respectfully requested that the rejections be reconsidered and withdrawn for all of the above reasons.

Respectfully submitted,



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